



**REQUIREMENTS FOR  
Single Family, Duplex and Townhome  
Foundation Design Input Parameters**

City of San Diego  
Development Services Department  
1222 First Avenue, MS 401, San Diego, CA 92101-4101

**INFORMATION  
BULLETIN**

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The purpose of this Information Bulletin is to summarize the procedure for determining load bearing values for foundation design of single family, duplex, and townhome residential structures when submittal of a geotechnical report is not required for building permits by the San Diego Municipal Code. A preliminary geotechnical investigation is normally conducted in accordance with the City of San Diego **Guidelines for Geotechnical Reports** to evaluate site conditions and provide input for foundation design. However, when submittal of a geotechnical report is not required by **San Diego Municipal Code (SDMC) §145.1803**, foundation design for single family, duplex, and townhome residential structures may be based on presumptive load bearing values depending on site soil conditions. The following sections provide the steps to follow based on the soil conditions of a site.

Three basic foundation material conditions are recognized; 1) Non-Expansive Natural Ground, 2) Fill Soil; and 3) Expansive Soil.

**I. NATURAL GROUND**

For non-expansive natural ground conditions, foundation design may be based on Section R401.4 and Table R401.4.1 of the 2016 California Residential Code (CRC). The foundation plan must indicate the class of the foundation bearing material and presumptive load-bearing values and must be signed by a civil engineer or architect licensed by the State of California and the following note should be placed on the foundation plan:

*"As a California licensed engineer/architect, I have classified the non-expansive natural ground materials as \_\_\_\_\_ per Table R401.4.1 of the 2016 California Residential Code and assigned a load-bearing pressure of \_\_\_\_\_ pounds per square foot for design of foundations related to this project."*

\_\_\_\_\_  
Engineer/architect  
(print and sign name)      Date signed

**Documents referenced in this  
Information Bulletin**

- **San Diego Municipal Code, ([SDMC Section §145.1803, Geotechnical Investigations](#))**
- **Land Development Manual, [2A: Project Submittal Requirements](#)**
- **[Guidelines for Geotechnical Reports](#)**
- **2016 California Residential Building Code,**

Single family, duplex, and townhome residential structures 3-stories or less of Type V construction designed for the presumptive load-bearing value of 1,500 pounds per square foot are exempt from this requirement. If the presumptive load-bearing value of 1,500 pounds per square foot (psf) is used for foundation design, the following note should be placed on the foundation plan:

*"The undersigned acknowledges by their signature below that the presumptive load-bearing value of 1,500 pounds per square foot is allowed for foundation design where the foundations are embedded in non-expansive natural ground. The undersigned understands that if the building inspector observes or suspects that fill materials or expansive soils are present in the building area, a geotechnical report prepared by a registered design professional may be required."*

\_\_\_\_\_  
Engineer/architect/owner  
(print and sign name)      Date signed

**II. FILL MATERIAL**

A preliminary geotechnical report or as-graded geotechnical report prepared by a registered design professional shall be submitted with all plans for buildings and structures supported on fill material. The preliminary geotechnical report or as-

graded geotechnical report shall be prepared in accordance with the City's *Guidelines for Geotechnical Reports*.

**III. EXPANSIVE SOIL**

A preliminary geotechnical report or as-graded geotechnical report prepared by a registered design professional shall be submitted with all plans for buildings and structures supported on expansive soil as described in Section R401.4 of the 2016 CRC. The preliminary geotechnical report or as-graded geotechnical report shall be prepared in accordance with the City's *Guidelines for Geotechnical Reports*.